

SYSTEM AND METHOD FOR INTERLEAVING DATA IN A
COMMUNICATIONS DEVICE

ABSTRACT OF THE DISCLOSURE

A system and method is provided for interleaving data in a communications device. The system includes a memory for storing symbols of a data block, a read module and a write module, each of which is coupled to the memory. The system also includes an interleaving logic module coupled to the read and write modules. The interleaving logic module determines an interleaving sequence comprising a sequence of memory addresses. Each memory address is then communicated sequentially to the read and write modules. When the read module receives the address, the read module reads the stored data symbol. When the write module receives the address, the write module writes a symbol from a next data block to the vacated address. The interleaving logic module repeats these steps until every symbol of the stored block has been read and every symbol of the next data block has been written to memory.